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Areni, Charles S. and Burger, Mitchell: The temporal construal of work and leisure results in illusory daily mood patterns 2010, 1-7.
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Disciplines

Business

Publication Details

Areni, C. S. & Burger, M. (2010). The temporal construal of work and leisure results in illusory daily mood patterns. Proceeding of the ANZMAC 2010 Conference (pp. 1-7). New Zealand: University of Canterbury.

The Temporal Construal of Work and Leisure Results in Illusory Daily Mood Patterns

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Abstract

In an internet survey, 349 respondents *predicted* that their moods for the workweek ahead would be lowest in the early morning, rising steadily to a peak in the evening, but there was no obvious trend in the *momentary* moods they actually experienced on each day. These results suggest that, several days in the future, paid work is viewed more negatively than free time, but that there is little or no systematic pattern in the moods actually experienced throughout a work day. In other words, paid work may not be as bad as we think and free time may not be as good as we think.

Keywords: moods, temporal construal, work, leisure, expectations

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Introduction

Recently, temporal construal theory (TCT) has been adopted by consumer researchers to understand how consumers perceive, value, and make trade-offs between periods of time at different points in the future. According to TCT, activities and possible events in the distant future are construed and evaluated in terms of abstract, universal, goal-relevant terms, whereas events in the immediate future are assessed in terms of concrete, context-specific terms (Trope and Liberman, 2003). The research reported below posits that construals of discretionary time in the distant future are more positive than construals in the immediate future. In essence, discretionary time in the distant future is overrated. The reverse is true of paid work. It is viewed in more negative terms in the distant future compared to when it is immediate. The results of an internet survey of a broad cross-section of Australians indicate that moods on weekday mornings were predicted to be worse than they actually were, whereas moods on weekday evenings were predicted to be better than they actually turned out to be. These biases may have implications for the allocation of time to consumption activities that tend to occur during specific periods of the day.

Do Daily Mood Patterns Actually Exist?

Empirical research on daily mood trends is equivocal. Initial studies reported a U-shaped pattern wherein moods were most positive in the morning and evening, with a decline in the middle of the day (Thayer, 1987; Thayer, Takahashi and Pauli, 1988), but subsequent research reported little or no daily mood patterns (Rafaeli, 1989; Chebat, Dube and Marquis, 1997). The most commonly reported patterns are either an improvement from morning to evening (Hedges, Jandorf and Stone, 1985; Hill and Hill, 1991; Egloff et al., 1995; Owens et al., 2000), or an inverted-U wherein moods initially improve until some point in the late afternoon or early evening, and then begin to decline toward late evening (Monk et al., 1985; De Castro, 1987; Clark, Watson and Leeka, 1989; Wood and Magnello, 1992; Boivin et al., 1997).

Collectively, these results suggest a general expectation for early morning moods to be less positive than moods at other points in the day (i.e., that indeed many of us are not morning persons). The research reported below posits that daily mood patterns reflect stereotypes stemming from the assumption that people are generally happier when they are free to choose their activities compared to when they are obligated to work (Dupre and Gagnier, 1996; Beatty and Torbert, 2003). The daily pattern emerges because weekday mornings (evenings) are associated with the onset of paid work (free time). According to TCT, the further into the future one considers a workday, the more these stereotypes influence predicted moods, hence mornings become associated with negative moods and evenings with positive moods.

In this specific context, the pattern predicted by TCT may reflect two specific cognitive biases, the differential accessibility of various work and leisure activities in memory, and the tendency to exaggerate the emotional consequences of salient events to the exclusion of other importance influences on mood. Memories of previous experiences are often biased because of the differential salience of some aspects of an experience relative to others. When people think of work, negative aspects of their jobs tend to be more salient (Clark and Watson, 1988), perhaps due to contemporary

ideologies that cast work as the means to the ultimate end of leisure (Gronau and Hamermesh, 2006), material wealth (Schor, 1998), and social status (De Botton, 2004). In short, work is portrayed as the price people pay to acquire something good (Douglas and Morris, 2006). These ideologies lead people to underestimate the extent to which work is intrinsically rewarding (Csikszentmihalyi and LeFevre, 1989) and/or provides a sense of purpose and meaning (Shamir, 1991). Likewise, when people think of their free time, fun and exciting activities come to mind more easily than the mundane activities they actually experience (Mitchell et al., 1997). Hence, paid work (free time) is consistently remembered and predicted to be worse (better) than it actually is.

Previous research has also shown that people tend to overestimate the intensity and duration of their affective responses, or conversely, underestimate their tendency to adapt to positive and negative news and events (Gilbert et al., 1998). It suggests that people might overestimate the effect of returning to paid work on Monday mornings. Although it may initially be less enjoyable than another day of free time, people adjust to work rather quickly and return to their equilibrium mood state. Likewise, coming home after a hard day at the office may initially engender a positive mood, but this quickly wears off as one adjusts to the realities of domestic life. All of this implies that the daily pattern will emerge for predicted moods in the more distant future, which will be influenced by these cognitive biases, but not for actual momentary moods, which are influenced by specific occurrences (Areni, 2002). Hence, the general research hypothesis is that people will predict that their moods on the weekdays ahead will steadily improve throughout each day from early morning to the evening, but that the moods they actually experience during that week will not exhibit any obvious daily pattern.

Method

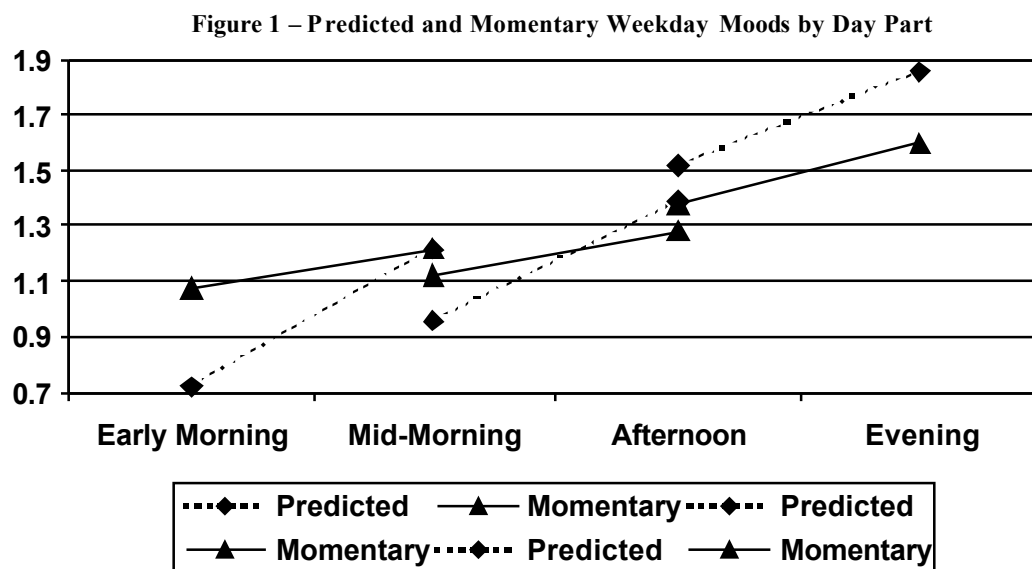
Respondents were selected from the panel of an Australian market research company from a base of 90,000 individuals. All panel members were sent an email invitation and provided with details of the cash-prize incentive involving 10 random draws for \$200 prizes. Of the initial 600 who registered, 349 respondents completed all components of the survey, 155 males (44%) and 194 females (56%). Ages ranged from 18 to 56. An internet survey was conducted in order to collect data on predicted moods for the upcoming week and momentary moods for the current week. Respondents predicted how they would feel during four day parts in the week ahead, early morning, mid-morning to lunch, afternoon, and evening. They then completed one momentary mood report per day. For each momentary mood report, respondents indicated the current day part, allowing the predicted and momentary moods to be matched by day part. Hence, *measure* (predicted, momentary), *time of day* (early morning, mid-morning to lunch, afternoon, evening), and *day of the week* were within-subjects factors. However, the design was a fractional, since only 7 moods were obtained for each measure, rather than the 28 (7 days x 4 day parts) required for a full factorial.

All predicted moods were collected on the Tuesday just prior to the target period. Respondents were asked to predict their mood in four day parts—early morning, mid-morning to lunch, afternoon, and evening—for each day of the upcoming week. The specific items were worded as follows: “Thinking about tomorrow (Wednesday), what will your mood be like in the early morning?” Subsequent days were worded “this Thursday”, “this Friday”, and so on for each day of the upcoming week. For the momentary mood measure, respondents were asked “What is your mood

like right now?" once per day on each day of the target period. They were allowed to select the time at which they reported, so long as they completed one momentary report per day. Each report was followed by the day part question, "What time is it at present?" with the response categories: "early morning," "mid-morning to lunch," "lunch to mid-afternoon," and "evening." The two mood measures involved a single, bi-polar response scale in order to reduce respondent fatigue given that eight successive daily surveys were required. The response scale was nine horizontally arrayed, equidistant circles one quarter inch in diameter. The left side was anchored by "very bad" and the right side was anchored by "very good". Respondents used a mouse to indicate which circle corresponded to their current mood. For purposes of data analysis, the scale was treated as ranging from -4 (very bad) to +4 (very good).

Results, Analysis, and Conclusion

Figure 1 presents the means for the predicted and momentary weekday moods for all respondents reporting moods in a given day part. However, since respondents were not required to complete momentary mood reports for each day part, the samples for successive day part mean contrasts are different, depending on who completed momentary mood reports in a given day part. If respondent reported momentary moods in the same day part for multiple days, the data were averaged to create an observation. For predicted moods, each paired comparison was significant in the expected direction. Moods in the early morning ($M = 0.72$) were predicted to be lower than those in mid-morning to lunch ($M = 1.22$) ($t_{1,174} = -3.38, p < .001$); predicted moods during mid-morning to lunch ($M = 0.96$) were more negative than predicted moods in the afternoon ($M = 1.39$) ($t_{1,172} = -3.15, p < .005$); and moods in the afternoon ($M = 1.52$) were predicted to be more negative than evening moods ($M = 1.86$) ($t_{1,348} = -2.81, p < .01$). Average momentary moods for each day part were subjected to the same paired comparisons as performed on the predicted moods.



As expected, momentary moods experienced in the early morning ($M = 1.08$) were not significantly different from momentary moods experienced in the mid-morning to lunch period ($M = 1.22$) ($t_{1,184} = -1.18, p > .24$). Momentary moods experienced from mid-morning to lunch ($M = 1.12$) were not

significantly different from moods experienced in the afternoon ($M = 1.28$) ($t_{1,184} = -1.38$, $p > .17$). Moods experienced in the evening ($M = 1.6$) were marginally better than moods experienced in the afternoon ($M = 1.38$) ($t_{1,184} = -1.83$, $p < .10$), but, overall, there was little or no effect of day part on momentary moods. These results suggest that actual moods do not vary systematically over the course of a weekday.

Additional paired comparisons suggest that respondents undervalued periods corresponding to the onset of paid work and overvalued periods associated with the onset of free time, at least in terms of their predicted moods during each period. Predicted moods in the early morning ($M = 0.72$) were more negative than the momentary moods experienced during that day part ($M = 1.08$) ($t_{1,244} = -3.20$, $p < .005$); but predicted moods in the evening ($M = 1.84$) were more positive than the moods actually experienced during that day part ($M = 1.6$) ($t_{1,184} = 2.49$, $p < .01$).

These results are consistent with the idea that people rely on inaccurate theories or stereotypes when predicting how they will feel in the future. The implicit theory suggested by this research is that moods are lowest on the morning and rise steadily throughout the day on workdays. This pattern is apparent in respondents' predicted moods, but not in the momentary moods they actually experienced throughout the work day. In short the implicit theory seems to be wrong, or at least, greatly overstated, and it is consistent with the idea that people erroneously assume that the onset of free time fosters better moods than the onset of paid labor. Hence, when considering and valuating future free time, people may overvalue weekday evenings and undervalue weekday mornings, at least in terms of the moods they expect to experience during these periods.

This interpretation is largely consistent with TCT, which posits that events in the future are construed in terms of general theories, stereotypes, and the desirability of possible outcomes, whereas events on the immediate horizon are conceived in terms of specific details and the ease of implementation. Returning to work on Monday morning may not seem very promising when viewed a few days in advance, but on the morning itself, moods may be driven more by some specific event (i.e. an email containing good news) rather than the prospect of returning to work. Likewise, returning home after a day's work may seem very desirable in the future compared to the moods actually experienced during that period.

The consequences of exaggerated daily mood patterns are perhaps less obvious and less dramatic than those for exaggerated weekly mood patterns (Areni, 2008). However, the stereotypical first cup of coffee in the morning could, in part, be driven by a perceived need to improve one's affective state (Brice and Smith, 2002), and this consumption pattern may persist despite evidence that caffeine has little influence on mood or general cognitive performance (Rogers et al., 2005). Likewise, alcohol consumption in the evening may reflect, in part, the expectation of a good mood that is, in fact, no more likely to occur than in any other part of the day. Watching television is another popular evening activity that may promise more happiness when considered in the future than it actually delivers on a moment by moment basis (Kubey and Csikszentmihalyi, 1989), because people expect to be happier at that point in the evening.

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